

§ 160.052-3a

§ 160.052-3a Materials—Dee ring and snap hook assemblies and other instruments of closure for buoyant vests.

(a) *Specifications.* Dee ring and snap hook assemblies and other instruments of closure for buoyant vests may have decorative platings in any thickness and must meet the following specifications:

(1) The device must be constructed of inherently corrosion resistant materials. As used in this section the term *inherently corrosion resistant materials* includes, but is not limited to brass, bronze, and stainless steel.

(2) The size of the opening of the device must be consistent with the webbing which will pass through the opening.

(b) *Testing requirements.* Dee ring and snap hook assemblies and other instruments of closure for buoyant vests must—

(1) Be tested for weathering. The Coast Guard will determine which one or more of the following tests will be used:

(i) Application of a 20 percent sodium-chloride solution spray at a temperature of 95 °F (35 °C) for a period of 240 hours in accordance with the procedures contained in method 811 of the Federal Test Method Standard No. 151.

(ii) Exposure to a carbon-arc weatherometer for a period of 100 hours.

(iii) Submergence for a period of 100 hours in each of the following:

(a) Leaded gasoline.

(b) Gum turpentine.

(iv) Exposure to a temperature of 0° ±5 °F (17.6 ±2.775 °C) for 24 hours; and

(2) Within 5 minutes of completion of the weathering test required by paragraph (b)(1) of this section, the assembly must be attached to a support and bear 150 pounds for an adult size and 115 pounds for a child size for 10 minutes at ambient temperatures without breaking or distorting.

[CGD 73-130R, 39 FR 20684, June 13, 1974]

§ 160.052-4 Materials—nonstandard vests.

(a) *General.* All materials used in nonstandard buoyant vests must be equivalent to those specified in § 160.052-3 and be obtained from a supplier who furnishes an affidavit in ac-

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cordance with the requirement in § 160.052-3(a).

(b) *Cover.* A vinyl-dip coating may be allowed for the covering of the vest instead of a fabric envelope if the coating meets the requirements in § 160.055-5(b)(2) of this chapter except there is no color restriction.

(c) *Reinforcing tape.* When used, the reinforcing tape around the neck shall be ¾" cotton tape weighing not less than 0.18 ounces per linear yard having a minimum breaking strength of not less than 120 pounds.

[CGFR 65-37, 30 FR 11588, Sept. 10, 1965, as amended by CGD 72-90R, 37 FR 10837, May 31, 1972; 37 FR 11774, June 14, 1972, CGD 72-163R, 38 FR 8120, Mar. 28, 1973]

§ 160.052-5 Construction—standard vests.

(a) *General.* This specification covers buoyant vests which essentially consist of a fabric envelope in which are enclosed inserts of buoyant material arranged and distributed so as to provide the flotation characteristics and buoyancy required to hold the wearer in an upright or slightly backward position with head and face out of water. The buoyant vests are also fitted with straps and hardware to provide for proper adjustment and close and comfortable fit to the bodies of various size wearers.

(b) *Envelope.* The envelope or cover shall be made of three pieces. Two pieces of fabric shall be cut to the pattern shown on Dwg. No. 160.052-1, Sheet 1 for adult size, and Sheets 2 and 3 for child sizes, and joined together with a third piece which forms a 2" finished gusset strip all around. Reinforcing strips of the same material as the envelope shall be stitched to the inside of the front piece of the envelope in way of the strap attachments as shown by the drawings.

(c) *Buoyant inserts.* The unicellular plastic foam buoyant inserts shall be cut and formed as shown on Dwg. 160.052-1, Sheet 4.

(d) *Tie tapes, body straps, and hardware.* The tie tapes, body straps, and hardware shall be arranged as shown on the drawings and attached to the envelope with the seams and stitching indicated.

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(e) *Stitching*. All stitching shall be short lock stitch conforming to Stitch Type 301 of Federal Standard No. 751, and there shall be not less than 7 nor more than 9 stitches to the inch.

(f) *Workmanship*. Buoyant vests shall be of first-class workmanship and shall be free from any defects materially affecting their appearance or serviceability.

[CGFR 65-37, 30 FR 11588, Sept. 10, 1965, as amended by CGD, 72-163R, 38 FR 8120, Mar. 28, 1973]

§ 160.052-6 Construction—nonstandard vests.

(a) *General*. The construction methods used for nonstandard buoyant vests must be equivalent to those requirements in §160.052-5 for a standard vest and also meet the requirements in this section.

(b) *Size*. Each nonstandard vest must contain the following volume of plastic foam buoyant material, determined by the displacement method:

(1) Five hundred cubic inches or more for an adult size;

(2) Three hundred and fifty cubic inches or more for a child, medium size;

(3) Two hundred and twenty-five cubic inches or more for a child, small size.

(c) *Arrangement of buoyant material*. The buoyant material in a nonstandard vest must:

(1) Be arranged to hold the wearer in an upright or backward position with head and face out of water;

(2) Have no tendency to turn a wearer face downward in the water; and

(3) Be arranged so that 70 to 75 percent of the total is located in the front of the vest.

(d) *Neck opening*. Each cloth-covered nonstandard vest must have at the neck opening:

(1) A gusset; or

(2) Reinforcing tape.

(e) *Adjustment, fit, and donning*. Each nonstandard vest must be made with adjustments to:

(1) Fit a range of wearers for the type designed; and

(2) Facilitate donning time for an uninitiated person.

[CGD 72-163R, 38 FR 8120, Mar. 28, 1973]

§ 160.052-7 Inspections and tests—standard and nonstandard vests.¹

(a) *General*. Manufacturers of listed and labeled buoyant vests shall—

(1) Maintain quality control of the materials used, the manufacturing methods and workmanship, and the finished product to meet the requirements of this subpart by conducting sufficient inspections and tests of representative samples and components produced;

(2) Make available to the recognized laboratory inspector and the Coast Guard inspector, upon request, records of tests conducted by the manufacturer and records of materials used during production of the device, including affidavits by supplier; and

(3) Permit any examination, inspection, and test required by the recognized laboratory or the Coast Guard for a produced listed and labeled device, either at the place of manufacture or some other location.

(b) *Lot size and sampling*. (1) A lot consists of 500 buoyant vests or fewer.

(2) A new lot begins after any change or modification in materials used or manufacturing methods employed.

(3) The manufacturer of the buoyant vests shall notify the recognized laboratory when a lot is ready for inspection.

(4) The manufacturer shall select samples in accordance with the requirements in Table 160.052-7(b)(4) from each lot of buoyant vests to be tested for buoyancy in accordance with paragraph (e) of this section.

TABLE 160.052-7(b)(4)—SAMPLE FOR BUOYANT VESTS

Lot size	Number of vests in sample
100 and under	1
101 to 200	2
201 to 300	3
301 to 500	4

(5) The manufacturer shall test—

¹The manufacturer of a personal flotation device must meet 33 CFR 181.701 through 33 CFR 181.705 which require an instruction pamphlet for each device that is sold or offered for sale for use on recreational boats.